

JOURNAL

OF THE

Pan-Pacific Research Institution

A Periodical Record of Investigations Bearing on Problems of Food Production, Distribution, Conservation and Consumption, as well as on Public Health, and Race and Population Problems as Related to the Countries Bordering on the Pacific.

Shore Fishes of Samoa

By David Starr Jordan

A List of the Fishes of Tasmania

By Clive Lord, I. L. S.

AT PRESENT PUBLISHED QUARTERLY AT HONOLULU, HAWAII
BY THE
PAN-PACIFIC UNION

More frequent publication as acceptable material is contributed.

Letters from Corresponding Members of the Pan-Pacific Research Institution

A number of letters are being received from members of the Pan-Pacific Research Institute in the Orient.

A recent letter from Dr. C. R. Kellogg, Fuchow, China, states that conditions are very much improved and that everything is quiet. He says, "It just occurs to me that I might give you a few notes on the possibilities of research in Fukien and some of the advantages we might expect from it. I am definitely planning now to organize in the city a Pan-Pacific Research Council like ours in Honolulu and believe the time is now ripe to get started. I have already sent out the letters and have heard from several sources suggestions that such a group be brought together, so believe we are started. I am planning to go to Manila to study at the Bureau of Science and look forward to this opportunity with a great deal of joy. We are expecting to see some of you here next fall and shall be ready to meet you. Everything will be going smoothly by then, I am sure.

A letter from Mr. H. Waragai, Kumakura, Japan, says, "We desire to have your opinion and assistance in a project here in Kurakawa. Our first plan includes the building of an aquarium where a representative collection of the fish of the Pacific ocean will be exhibited. Upon completion, the aquarium will be presented to the government, to make it one of the national aquariums. I have written to the director of the

Honolulu aquarium for the exchange of the Hawaiian fish with the Japanese varieties, and I hope you will also exert your efforts towards a satisfactory arrangement of the exchange of fish. As Kamakura is the foremost seaside resort of Japan on the Pacific Ocean, it is also an ideal spot for any building or institution that signify the principles of the Pan-Pacific movement so ably started by your good efforts. If any of the Pan-Pacific organizations, or any institution of Hawaii desires to erect any building in the proposed seaside park of Kamakura for the purpose of promoting the good-will and friendship of the Pan-Pacific people, I will be most pleased to offer the building site in the proposed park, required for the purpose."

A letter from Dr. W. E. Hoffman, Lingnan University, Canton, China, says: "It gave me a real thrill not long ago in Hongkong to have a nice visit with your Dr. Krauss, fresh from the Pan-Pacific Research Institute in Honolulu. I took him to Canton for a day to visit the Lingnan University. You will find in Volume 4, No. 1, of the Lingnan Agricultural Review, under the topics of 'Another Pan-Pacific Research Institute,' 'Journal of the Pan-Pacific Research Society,' and 'A List of Chinese Fishes,' that I have given the Pan-Pacific Union and the Pan-Pacific Research Institute and its official organ extensive notices. We had to close down our institution on April 5th, but hope to be able to open next fall without difficulty."

Fishes of the Pacific Ocean

SHORE FISHES OF SAMOA

By

DAVID STARR JORDAN

The reefs of Samoa, the Navigator Islands, are very rich in species of fishes. The only extensive survey of the fish-fauna yet made was undertaken by the present writer in 1903, assisted by Professor Vernon Kellogg and Robert E. Allardice of Stanford University, and by Knight Starr Jordan and Michitaro Sindo, students in the same institution. Four local fishermen, Taula from Rarotonga, Vaiula, Musila and Afele from Apia, were employed. The two islands, Upolu (Apia) and Tutuila (Pago-Pago) were examined with fair thoroughness, but no pelagic fishes, and none living outside the reef, was obtained. The record of the species collected was published by Jordan and Seale (Alvin) under the title of "Fishes of Samoa" in December, 1906, by the United States Bureau of Fisheries, with figures or colored plates of new or rare species. On "The Fishes of Samoa" the present catalogue is based. A considerable number of species have been since added to the list from the Güenther's *Fische der Südsee*, edited by Mr. C. Tate Regan, the last portion (Heft VIII, IX) being subsequent to the fishes of Samoa. Stanford University, January 1, 1927.

Family 1. CARCHARHINIDÆ, the Gray Sharks

CARCHARHINUS Blainville.

1. *Carcharhinus melanopterus* (Quoy & Gaimard). *Malie Alamata*.

2. *Carcharhinus limbatus* (Müller & Henle).

Family 2. SPHYRNIDÆ, the Hammer Head Sharks.

SPHYRNA Rafinesque.

2a. *Sphyrna zygaena* L.

Family 3. GINGLYMOSTOMIDÆ, the Nurse Sharks.

2b. *Ginglymostoma muelleri* (Günther).

Family 4. DASYATIDÆ, the Sting Rays.

DASYATIS Rafinesque.

2c. *Dasyatis kuhli* (Müller & Henle).

3. *ANACANTHUS* (Ehrenberg) Cuvier.

ANACANTHUS uarnak (Forskål) *Fai* (*Hunantura fai*, Jordan & Seale).

Family 5. AETOBATIDÆ.

STOASODON Cantor.

2d. *Stoasodon narinari* (Euphrasen).

Family 6. ELOPIDÆ, The Tenpounders.

ELOPS Linnæus.

4. *Elops hawaiiensis* Regan.

Family 6a. MEGALOPIDÆ, The Tarpons.

MEGALOPS Lacepede.

5. *Megalops cyprinoides* (Broussonet).

Family 7. CHANIDÆ, The Milk-Fishes.

CHANOS Cuvier.

6. *Chanos chanos* (Forskål).

Family 7a. DUSSUMIERIDÆ, The Round Herrings.

SPRATTELLOIDES Bleeker.

7. *Spratelloides delicatulus* (Bennett), *Nefu*.

7a. *Spratelloides alburnus* (Kner and Steindachner).

Family 8. CLUPEIDÆ, The Herrings.

SARDINIA Poey.

8. *Sardinia sirm* (Forskål). *Ia Moana; Pelu-pelu*.

HARENGULA Cuvier and Valenciennes.

9. *Harengula commersoni* (Cuvier and Valenciennes). *Pelupelu*.

9a. *Harengula gibbosa* Bleeker.

9b. *Harengula rechingeri* (Steindachner).

Family 8a. ENGRAULIDÆ, The Anchovies.

STOLEPHORUS Lacepede.

10. *Stolephorus apiensis* Jordan and Seale. *Nefu*.

11. *Stolephorus evermanni* Jordan and Seale.

Family 9. SYNODONTIDÆ, The Lizard-

SYNODUS Schneider.

12. *Synodus varius* (Lacepede).

SAURIDA Cuvier.

13. *Saurida gracilis* (Quoy and Gaimard).

Family 10. PLOTOSIDÆ, The Mad Cat-

Fishes.

PLOTOSUS Lacepede.

14. *Plotosus anguillaris* (Bloch).

Family 11. ARIIDÆ, The Sea Cat-Fishes.

ARIUS Cuvier and Valenciennes.

15. *Arius graeffi* (Kner and Steindachner). (Locality doubtful).

Family 12. ANGUILLIDÆ, The Eels.

ANGUILLA Thunberg.

16. *Anguilla mauritana* Bennett. *Tuna-tafa' i lantalo; Tuna gatata*.

17. *Anguilla ausitensis* Günther. *Tuna mea*.

18. *Anguilla sidat* Bleeker.

19. *Anguilla australis* Richardson.

Family 13. CONGRIDÆ, The Congers.

CONGER Cuvier.

20. *Conger cinereus* Weber and de Beaufort; *Pusi Solasula*.

ALLOCONGER Jordan and Hubbs.

21. *Alloconger guttulata* (Günther).

Family 14. OPHICHTHYIDÆ, The Snake-Eels.

DALOPHIS Rafinesque.

22. *Dalophis longipinnis* Kner and Steindachner.
ANGUISURUS Kaup.
- 22a. *Anguisurus polyopthalmus* (Bleeker).
ANGUISURUS filaria Günther.
23. *Leiuranus semicinctus* (Lay and Bennett). 'Ata ata Uli.
CHLEVASTES Jordan and Snyder.
24. *Chlevastes colubrinus* (Boddaert).
25. *Chlevastes fasciatus* (Ahl).
PISODONOPHIS Kaup.
- 25a. *Pisodonophis cancrivorus* Richardson.
- Family 15. MORINGUIDÆ, The Worm-Eels.
MORINGUA Gray.
- 25b. *Moringua javanica* (Kaup).
26. *Moringua macrocephala* Bleeker.
- Family 16. MURÆNIDÆ, The Morays.
RHINECHIDNA Barbour.
27. *Rhinechidna eritima* (Jordan and Seale).
(schimathorhynchus Bleeker).
ENCHELYNASSA Kaup.
- 28c. *Rhinechidna* Barbour.
MURÆNA Linnæus.
- 28a. *Muræna pardalis* Scheigel.
STROPHIDON McClelland.
- 28b. *Strophidon brummeri* (Bleeker).
RHINECHIDNA Barbour.
- 28c. *Rhinechidna* Barbour.
- 28c. *Rhinechidna eritima* Jordan & Seale.
GYMNOTHORAX Bloch.
29. *Gymnothorax petelli* (Bleeker).
30. *Gymnothorax meleagris* (Shaw).
31. *Gymnothorax thyrsoideus* (Richardson).
32. *Gymnothorax rüppellii* (McClelland).
33. *Gymnothorax tanioides* (Günther).
34. *Gymnothorax tessellatus* Richardson.
- 35b. *Gymnothorax burensis* (Bleeker).
36. *Gymnothorax burensis* (Bleeker).
37. *Gymnothorax javanicus* (Bleeker). *Pusi macale*.
38. *Gymnothorax flavomarginatus* (Rüppell).
Pusi gatala (spotted moray).
39. *Gymnothorax talofa* Jordan and Starks.
40. *Gymnothorax chilospilus* Bleeker.
41. *Gymnothorax richardson* (Bleeker).
42. *Gymnothorax undulatus* (Lacepède).
Pusi pulepule.
43. *Siderea picta* (Ahl). *Pusi galata*.
44. *Siderea lita* (Richardson).
ECHIDNA Forster.
- 45a. *Echidna xanethospilos* (Bleeker).
- 45a. *Echidna xanthospilos* (Bleeker).
GYMNOMURÆNA Lacepède.
46. *Gymnomuræna zebra* (Shaw).
- 46a. *Gymnomuræna concolor* (Rüppell).
- 46b. *Gymnomuræna supraforata* Regan.
LEIHALA L. K. Jordan.
47. *Leihala trossula* Jordan and Starks.
48. *Leihala delicatula* (Bleeker).
ANARCHIAS Jordan and Starks.
49. *Anarchias allardicei* Jordan and Starks.
50. *Anarchias knighti* Jordan and Seale.
SCUTICARIA Jordan and Snyder.
51. *Scuticaria tigrina* (Lesson). *Pusi solasulu*.
UROPTERYGIUS.
52. *Uropterygius mormoratus* (Lacepède).
53. *Uropterygius macrocephalus* (Bleeker).
Pusi, sulalulu.
54. *Uropterygius concolor* Rüppell.
Family 17. BELONIDÆ.
TROPIDOCAULUS Ogilby.
55. *Tropidocaulus platyrus* Bennett. *Ise*.
TYLOSURUS (Cocco).
57. *Tylosurus liuroides* (Bleeker). *A'u*.
58. *Tylosurus giganteus* (Schlegel). *A'u*.
Family 18. HEMIRAMPHUS, the Half Beaks.
HEMIRAMPHUS Cuvier.
59. *Hemiramphus pacificus* Steindachner.
60. *Hemiramphus affinis* Günther. *Ise lai*.
- 60a. *Hemiramphus dussumieri* Cuv. and Val.
=(samoensis Steindachner.)
ZENARCHOPTERUS GILL.
61. *Zenarchopterus vaisiganis* Jordan and Seale. *Taoto*.
Family 19. EXOCETIDÆ, the Flying Fishes.
EXONAUTES Jordan and Evermann.
- 61a. *Exonastes speculiger* (Cuv. and Val.).
62. *Exonastes gilberti* (Jordan).
CYPSELURUS Swainson.
63. *Cypselurus pæciropterus* (Cuvier and Valenciennes).
64. *Cypselurus quindecimradiatus* Fowler.
65. *Cypselurus katoptron* (Bleeker).
Family 20. AULOSTOMIDÆ.
AULOSTOMUS Cuvier.
66. *Aulostomus chinensis* (L.). *Taotito*.
Family 21. FISTULARIIDÆ.
FISTULARIA Linnæus.
67. *Fistularia petimba* Lacepède.
- Family 22. MACRORHAMPHOSIDÆ.
MACRORHAMPHOSUS Lacepède.
68. *Macrorhamphosus brevispinis* (Kner and Steindachner).
Family 23. SYNGNATHIDÆ.
CORYTHOICHTHYS Kaup.
69. *Corythoichthys hæmatopterus* (Bleeker)
=(waitei Jordan and Seale).
70. *Corythoichthys conspicillatus* (Jenyns)
=(sealei Jordan and Starks).
71. *Corythoichthys mataafa* Jordan and Seale.
MICROPHIS Kaup.
72. *Microphis brachyurus* (Bleeker). *Taotao*.
73. *Microphis caudatus* Peters (=*torrentius* Jordan and Seale).
SYNGNATHOIDES Bleeker.
74. *Syngnathoides biaculeatus* (Bloch).
Family 24. ATHERINIDÆ.
ATHERINA Linnæus.
75. *Atherina uisila* Jordan and Seale.
HIPPOCAMPUS Rafinesque.
- 75a. *Hippocampus kuda* (Bleeker).
Family 25. MUGILIDÆ.
MUGIL Linnæus.
76. *Mugil caldwelli* Fowler.
77. *Mugil argenteus* Quoy and Gaimard.
LIZA Jordan and Swain.
78. *Liza melinoptera* (Cuvier and Valenciennes). *Afa; Fualafa*.
79. *Liza cæruleomaculata* Lacepède. *Ana'e; Ana'analagi*.
80. *Liza troscheli* (Bleeker). *Aua*.

81. *Liza rechingeri* (Steindachner).
Family 26. SPHYRÆNIDÆ.
SPHYRÆNA Linæus.
82. *Sphyræna obtusata* Cuvier and Valenciennes. *Sapatu*.
83. *Sphyræna forsteri* Cuvier and Valenciennes.
Family 27. POLYNEMIDÆ.
POLYNEMUS L.
84. *Polynemus plebeius* (Broussonet). *Uriumia*.
- Family 28. HOLOCENTRIDÆ.
MYRIPRISTIS Cuvier.
85. *Myripristis murdjan* (Forskål). *Manifinif*.
86. *Myripristis intermedius* (Günther). *Malau*.
87. *Myripristis adustus* Bleeker. *Malau uo*.
88. *Myripristis microphthalmus* Bleeker. *Malau tea*; *Malau mataputa*.
89. *Myripristis hexagonus* (Lacepède).
90. *Myripristis sanguineus* Jordan and Seale. *Malau ula*; *Segasega*.
91. *Myripristis pralinus* Cuvier and Valenciennes. *Mamo*; *Malau mamo*.
92. *Myripristis multiradiatus* Günther.
HOLOTRACHYS Günther.
93. *Holotrachys lima* (Cuvier and Valenciennes). *Malau mutu*; *Mutu*.
- HOLOCENTRUS (Graman) Scopoli.
94. *Holocentrus spinifer* Forskål. *Malau toa*.
95. *Holocentrus caudimaculatus* Rüppell. *Tamalau mumu*; *Tameno mumu*.
96. *Holocentrus violaceus* Bleeker. *Malau tifi*; *malau uli*.
97. *Holocentrus binotatus* Quoy and Gaimard.
98. *Holocentrus erythræus* Günther.
99. *Holocentrus tiere* Lesson.
100. *Holocentrus punctatissimus* Cuvier and Valenciennes. *Malau fatumu*.
101. *Holocentrus diadema* (Lacepède). *Malau tusitusi*; *Malau pauli*; *Malau tui*.
102. *Holocentrus praslin* Lacepède.
103. *Holocentrus microstomus* Günther.
104. *Holocentrus lævis* Günther.
105. *Holocentrus sammara* Forskål. *Malau peapea*.
106. *Holocentrus opercularis* (Cuvier and Valenciennes).
Family 29. SCOMBRIDÆ.
RASTRELLIGER Jordan.
107. *Rastrelliger loo* (Cuvier and Valenciennes). *Ga*.
Family 30. XIPHIIDÆ.
XIPHIIDÆ L.
108. *Xiphias gladius* L.
Family 31. CARANGIDÆ.
SCOMBEROIDES Lacepède.
109. *Scomberoides sanctipetri* (Cuvier and Valenciennes). *Lai*.
110. *Megalaspis cordyla* (Linnæus). *Atuolo*.
SELAR Bleeker.
111. *Selar lundini* Jordan and Seale.
TRACHUOPS Gill.
112. *Trachuops mauritiana* (Bloch). *Atule*.
- CARANX Lacepède.
113. *Caranx melampygus* Cuvier and Valenciennes. *Uluu*.
114. *Caranx stellatus* Quoy and Gaimard. *Malauli*.
115. *Caranx marginatus* (Gill).
116. *Caranx ignobilis* (Forskål). *Lupo*.
117. *Caranx sexfasciatus* (Quoy and Gaimard). *Lupo*.
- FERDAUIA Jordan, Evermann & Wakiya.
118. *Ferdauia jordani* (Nichols). *Lupo*.
GNATHANODON Bleeker.
119. *Gnathanodon speciosus* (Forskål).
CITULA Cuvier and Valenciennes.
120. *Citula plumbea* (Quoy and Gaimard). *Lupo*; *Lupo ta*; *Lalafutu*; *Alalafutu*.
121. *Citula gilberti* Jordan and Seale.
ALECTIS Rafinesque.
122. *Alectis ciliaris* (Bloch).
TRACHINOTUS Lacepède.
123. *Trachinotus falcatus* Forskål. *Alalafutu*.
124. *Trachinotus bailloni* Lacepède.
Family 32. CENTROLOPHIDÆ.
SCHEDEPHILUS Cuvier.
125. *Schedophilus medusophagus* Cocco.
Family 33. PEMPHERIDÆ.
PEMPHERIS Cuvier.
126. *Pempheris oualensis* Cuvier and Valenciennes. *Maifi*; *Fo a'ao*.
LIOPEMPHERIS Ogilby.
127. *Pempheris vanicolensis* Cuvier and Valenciennes. *Pula*.
Family 34. SCORPIDÆ.
MONODACTYLUS Lacepède.
128. *Monodactylus argenteus* (Linnæus). *Toto*.
Family 35. APOGONIDÆ.
APOGON Lacepède. *Fo*.
129. *Apogon snyderi* (Jordan and Evermann).
130. *Apogon exostigma* Jordan and Starks.
131. *Apogon crassiceps* (Garman).
132. *Apogon savayensis* (Günther).
133. *Apogon koilomatodon* (Bleeker).
134. *Apogon aroubensis* (Hombron and Jacquinot).
135. *Apogon novemfasciatus* (Cuvier and Valenciennes).
137. *Apogon erythrinus* (Snyder).
138. *Apogon doryssus* (Jordan and Seale).
139. *Apogon lateralis* (Valenciennes).
NECTAMIA Jordan.
- Nectamia fusea* Quoy and Gaimard.
- 139a. *Nectamia fusea* Quoy and Gaimard.
ZORAMIA Jordan.
140. *Zoramia græffei* (Günther).
FOA Jordan and Evermann.
141. *Foa fo* Jordan and Seale. *Fo*.
142. *Foa vaiulæ* Jordan and Seale.
FOWLERIA Jordan and Evermann.
143. *Fowleria variegata* (Valenciennes).
144. *Fowleria marmorata* (Alleyne and Macleay). *Fo mumu* (red).
145. *Fowleria isostigma* Jordan and Seale.
ARCHAMIA Gill.
146. *Archamia lineolata* (Ehrenberg). (Cuvier and Valenciennes). *Fo*.

CHEILODIPTERUS Lacepède.

147. Cheilodipterus quinquelineatus (Cuvier and Valenciennes). *Mata uliuli*.
 148. Cheilodipterus macrodon (Lacepède). *Tuganini*.

Family 36. AMBASSIDÆ.

AMBASSIS Lacepède.

149. Ambassis lafa Jordan and Seale. *Lafa*.
 150. Ambassis vaivasensis Jordan and Seale. *Lafa*.

Family 37. KUHLIIDÆ.

KUHLI A. Gill.

151. Kuhlia rupestris (Lacepède). *Sesele*.
 152. Kuhlia marginata (Cuvier and Valenciennes). *Salele*.

SAFOLE Jordan

153. Safole tæniura (Cuvier and Valenciennes). *Safole*.

Family 38. EPINEPHELIDÆ.

CHORISTISTIUM Poey.

154. Chorististium susumi Jordan and Seale. *Susu umi*.

PARACANTHISTIUS Bleeker.

155. Paracanthistius maculatus (Bloch).

ANYPERODON Günther.

156. Anyperodon leucogrammicus (Cuvier and Valenciennes). *Gatala aleva*.

VARIOLA Swainson.

157. Variola louti (Forskål). *Ia manaia*.
 158. Variola flavimarginata (Rüppell).
 CEPHALOPHOLIS Bloch and Schneider.
 159. Cephalopholis argus (Bloch) *Galata moana* (blue spotted); *Galata uli*; *Vaiana*.

160. Cephalopholis urodelus (Forster). *Mata'ili*.

161. Cephalopholis leopardus (Lacepède). *Gatala uli*.

162. Epinephelus merra Bloch. *Gatala*; *'Aa'ata pulepule*.

163. Epinephelus stellans (Richardson).

164. Epinephelus dæmeli (Günther). *'Uo'uo*.

165. Epinephelus fuscoguttatus (Forskål).

166. Epinephelus corallicola (Cuvier and Valenciennes).

167. Epinephelus maculatus (Bloch).

168. Epinephelus socialis (Günther).

169. Grammistes sexlineatus (Thunberg).

Family 39. PLESIOPIDÆ.

PLESIOPS Cuvier.

170. Plesiops nigricans Rüppell.

171. Plesiops melas (Bleeker).

Family 40. PRIACANTHIDÆ.

PRIACANTHUS Cuvier.

172. Priacanthus carolinus (Cuv. and Val.). *Mata-pula*.

Family 41. LUTIANIDÆ.

LUTIANUS Bloch.

173. Lutianus kasmira (Forskål).

174. Lutianus gibbus (Forskål). *Ti'ava*; *Mala'i*; *Mala'i pa'pae*.

175. Lutianus bohar (Forskål). *Mumea*.

176. Lutianus argentimaculatus (Forskål). *A'a*; *Nanue*.

177. Lutianus rivulatus (Cuvier and Valenciennes). *Uui*; *Nanue*.

178. Lutianus marginatus Cuvier and Val-

enciennes. *Taiva*; *Tagau*; *Tamala*; *Lanue*; *Nanue*.

179. Lutianus lineatus (Quoy and Gaimard).

180. Lutianus monostigma (Cuvier and Valenciennes). *Taiva uliuli*; *Vava sui*; *Feloitega*.

MACOLOR Bleeker.

181. Macolor niger (Forskål).

Family 42. CÆSIONIDÆ.

CÆSIO Cuvier.

182. Cæzio cæruleus (Lacepède).

Family 43. THERAPONIDÆ.

THERAPON Cuvier.

183. Therapon jarbua (Forskål). *'Ava'ava*.

Family 44. HÆMULIDÆ.

PLECTORHYNCHUS Lacepède.

184. Plectorhynchus diagramma (Lacepède). *'Ava'ava moana*.

185. Plectorhynchus orientalis (Bloch).

186. Plectorhynchus chætodonoides Lacepède. *I'a mai-moana*.

EUELATICHTHYS Fowler.

187. Eulatichtys crassispinus (Rüppell). *Misimisi*.

SCOLOPSIS Cuvier.

188. Scolopsis trilineata Kner. *Taiva tusi*.

189. Scolopsis lineata (Quoy and Gaimard).

Family 45. DENTICIDA.

GNATHODENTEX Bleeker.

190. Gnathodentex aurolineatus (Lacepède). *Tolai*.

Family 46. LETHRINIDÆ.

LETHRINUS Cuvier.

191. Lethrinus ramak (Forskål). *Mailafo'u*; *Magauli*.

192. Lethrinus harak (Forskål). *Mata'ele'ele*.

193. Lethrinus bonhamensis Günther.

194. Lethrinus amboinensis Bleeker.

195. Lethrinus mahsena (Forskål).

LETHRINELLA Fowler.

196. Lethrinella miniata (Forster). *Filoa 'ava*.

197. Monotaxis grandoculis (Forskål). *Mumu moaga*; *Loatia*.

Family 47. KYPHOSIDÆ.

198. Kyphosus waigiensis (Quoy and Gaimard). *Umue*; *Matumutu*.

Family 48. GERRIDÆ.

GERRES Cuvier (Quoy and Gaimard).

199. Gerres gigas (Günther). *Matu loa*.

200. Gerres argyreus Forster. *Matu*.

201. Gerres macrosoma (Bleeker).

Family 49. LEIOGNATHIDÆ.

LEIOGNATHUS Lacepède.

202. Leiognathus fasciata (Lacepède).

Family 50. MULLIDÆ.

UPENEOIDES Bleeker.

203. Upeneoides vittatus (Forskål). *Vete*.

UPENEUS Cuvier.

204. Upeneus moana Jordan and Seale. *Moana*; *Moaga*; *Maga*; *Moana faiava*.

205. Upeneus atrocingulatus (Kner). *Moana*; *Moaga*.

206. Upeneus bifasciatus (Lacepède). *Matalau uliuli*; *Maga*.

207. *Upeneus chryserydros* (Lacepède) *Matalau*.
208. *Upeneus cyclostomus* (Lacepède).
209. *Upeneus barberinus* (Lacepède). *Ta'ulei*.
230. *Upeneus indicus* (Shaw). *Ta'uleia; Lailai*.
- MULLOIDES Bleeker.
231. *Mulloidies auriflamma* (Forskål). *Ula'oa; Vete*.
232. *Mulloidies samoensis* Günther. *Afolu; Pa sina*.
- Family 51. MALACANTHIDÆ.
- OCEANOPS Jordan and Seale.
233. *Oceanops latovittata* (Lacepède). *Gatasama*.
- Family 52. CIRRHITIDÆ.
234. *Cirrhitus marmoratus* Lacepède. *Potati*.
235. *Paracirrhites punctatus* (Cuvier and Valenciennes).
- Family 53. POMACENTRIDÆ.
- AMPHIPRION Bloch and Schneider.
236. *Amphiprion melanopus* Bleeker.
237. *Amphiprion xanthurus* Cuvier and Valenciennes.
- POMACENTRUS Lacepède.
238. *Pomacentrus pavo* (Bloch). *Taupou*.
239. *Pomacentrus vaiuli* Jordan and Seale. *Vaiuli*.
240. *Pomacentrus melanopterus* Bleeker. *I'u sina; Tu'u'u*.
241. *Pomacentrus inornatus* De Vis.
242. *Pomacentrus nigricans* Lacepède. *Tu'u'u*.
243. *Pomacentrus albofasciatus* Schlegel. *Ulavapua*.
244. *Pomacentrus eclipticus* Jordan and Seale.
245. *Pomacentrus lividus* (Forster). *Tu'u'u sue uli; I'u sina*.
- ABUDEFDUF Forskål.
246. *Abudefduf sordidus* (Forskål). *Ulavapua*.
247. *Abudefduf septemfasciatus* (Cuvier and Valenciennes). *Mutu; Alala saga*.
248. *Abudefduf saxatilis* (Linnaeus).
249. *Abudefduf coelestinus* (Cuvier and Valenciennes). *Fili mana*.
- CHRYSIPTERA Swainson.
250. *Chrysiptera dicki* (Liénaud). *Tu'u'u*.
251. *Chrysiptera lacrymatua* (Quoy and Gaimard). *I'u samasama*.
252. *Chrysiptera behni* (Bleeker).
253. *Chrysiptera glauca* (Cuvier and Valenciennes).
254. *Chrysiptera zonata* (Cuvier and Valenciennes). *Tu'u'u*.
255. *Chrysiptera amabilis* (De Vis).
256. *Chrysiptera antjeria* (Kuhl and Van Hasselt). *Tu'u'u*.
257. *Chrysiptera leucopoma* (Cuvier and Valenciennes). *Tu'u'u*.
258. *Chrysiptera uniocellata* (Quoy and Gaimard). *Taupou*.
259. *Chrysiptera taupou* Jordan and Seale. *Vaiuli sama; Taupou*.
260. *Chrysiptera filamentosa* Macleay (metallicus J. & S.).
- DASCYLLUS Cuvier).
261. *Dascyllus aruanus* Linnaeus. *Mamo*.
262. *Dascyllus trimaculatus* (Rüppell).
- CHROMIS Cuvier.
263. *Chromis cæruleus* (Cuvier and Valenciennes). *Pa lanu-moana; Teatea; Mamo*.
264. *Chromis analis* (Cuvier and Valenciennes). *Pa lanu-moana*.
265. *Chromis iomelas* Jordan and Seale.
- Family 54. CORIDÆ.
- EPIBULUS Cuvier.
266. *Epibulus insidiator* (Pallas).
- LABROIDES, Bleeker
267. *Labroides dimidiatus* (Cuvier and Valenciennes).
- LABRICHTHYS Bleeker.
268. *Labrichthys cyanotænia* (Bleeker). *Sugale ululi*.
- HEMIGYMNUS Günther.
269. *Hemigymnus melapterus* (Bloch). *Alati moana; Paumutu; Afataimi; Tagitagi; Sugale uli; Sugale aloa*.
270. *Hemigymnus fuliginosus* (Lacepède).
- AMANPSES Cuvier.
271. *Anampses cæruleopunctatus* Rüppell. *Sugale lupe*.
272. *Anampses diadematus* Rüppell.
273. *Anampses melanurus* Bleeker.
- STETHOJULIS Günther.
274. *Stethojulis strigiventer* (Bennett).
275. *Stethojulis renardi* Günther.
276. *Stethojulis casturi* Günther.
277. *Stethojulis phekadopleura* Bleeker.
278. *Stethojulis bandanensis* (Bleeker).
- LEPTOJULIS Bleeker.
279. *Lepto julis pardalis* Kner.
- MACROPHARYNGODON Bleeker.
280. *Macropharyngodon meleagris* (Cuvier and Valenciennes).
- PLATYGLOSSUS Bleeker.
281. *Platy glossus marginatus* (Rüppell).
282. *Platy glossus notopsis* (Kuhl and Van Hasselt).
283. *Platy glossus flos-corallis* Jordan and
284. *Platy glossus hæveni* (Bleeker.)
- HALICHERES Rüppell.
285. *Halicheres centiquadrus* (Lacepède). *Ifigi*.
286. *Halicheres notophthalmus* (Bleeker).
287. *Halicheres trimaculatus* (Quoy and Gaimard).
288. *Halicheres dædalma* Jordan and Seale. *Fataga loa*.
289. *Halicheres opercularis* (Günther).
- JULIS Cuvier.
290. *Julis greenovii* Bennett.
- 290a. *Julis cingulum* (Lacepède).
291. *Julis gaimardi* (Quoy and Gaimard).
- CHEILIO Lacepède.
292. *Cheilio inermis* (Forskål). *Masamie; Moai*.
- THALASSOMA Swainson.
293. *Thalassoma güntheri* (Bleeker).
294. *Thalassoma purpureum* (Forskål).
295. *Thalassoma cyanogaster* (Cuvier and Valenciennes).
296. *Thalassoma fuscum* (Lacepède).
297. *Thalassoma umbrostigma* (Rüppell).

- 297a. *Thalassoma aneitense* Günther.
 298. *Thalassoma dorsale* (Quoy and Gaimard). *Sugale sei*; *Sugale pulepule*; *Sugale fa'a ele'ele*.
 GOMPHOSUS Lacepède.
 299. *Gomphosus varius* (Lacepède).
 300. *Gomphosus tricolor* (Quoy and Gaimard). *Sugale*.
 CHEILINUS Lacepède.
 301. *Cheilinus trilobatus* Lacepède. *Sugale matamumu*; *Lalafi*.
 302. *Cheilinus fasciatus* (Bloch). *Lalafi pulepule*.
 303. *Cheilinus digrammus* (Lacepède). *Sugale*; *Lalafi*.
 304. *Cheilinus undulatus* Rüppell.
 THALLIURUS Swainson.
 305. *Thalliurus chlorurus* (Bloch). *Sugale gasufi*.
 PSEUDOCHEILINUS Bleeker.
 306. *Pseudochelinus hexatania* (Bleeker). *I'a tusitusi*.
 NOVACULICHTHYS Bleeker.
 307. *Novaculichthys taniurus* (Lacepède). *Molemole*.
 308. *Novaculichthys kallosomus* Bleeker.
 Family 55. SCARIDÆ.
 SCARUS Forskål.
 309. *Scarus pyrrhurus* Jordan and Seale. *Fuga mumu*.
 310. *Scarus ruberrimus* (Jordan and Seale). including *upolensis* J. & S.). *Fuga ulapo*.
 311. *Scarus purpureus* Cuvier and Valenciennes.
 312. *Scarus erythrodon* (Cuvier and Valenciennes). *Fuga 'avasai*.
 313. *Scarus erythacus* (Jordan and Seale).
 314. *Scarus dubius* Bennett.
 315. *Scarus galena* E. K. Jordan.
 316. *Scarus lacerta* (Cuvier and Valenciennes).
 317. *Scarus balinensis* (Bleeker). *Fuga pa'i*; *Fuga pa'ipa'i*; *Fuga mea*.
 318. *Scarus harid* Forskål.
 319a. *Scarus mutabilis* Garman.
 319b. *Scarus muricatus* Cuv. and Val.
 320. *Scarus oviceps* Cuvier and Valenciennes. *Fuga uli*.
 321. *Scarus bataviensis* Bleeker. *Tapoli*; *Laea mumu*.
 322. *Scarus spilonotus* Kner.
 324. *Scarus fumifrons* (Jordan and Seale).
 325. *Scarus kelloggii* (Jordan and Seale).
 PSEUDOSCARUS Bleeker.
 326. *Pseudoscarus prasiognathus* (Cuvier and Valenciennes). *Amasapupema*.
 327. *Pseudoscarus maoricus* (Jordan and Seale). *Moalefuga*.
 328. *Pseudoscarus latax* (Jordan and Seale). *Laea pulepule*; *Laea mumu*.
 329. *Pseudoscarus abacurus* Jordan and Seale.
 329a. *Pseudoscarus cyanogrammus* (Jordan and Seale).
 330. *Pseudoscarus jordani* (Jenkins). *Galo*; *Laea galo*.
 331. *Pseudoscarus ultramarinus* (Jordan and Seale). *Fuga gahu-moana*.
 332. *Pseudoscarus pectoralis* Cuvier and Valenciennes). *Fugausi*. (Ps. lazueinus Jordan and Seale).
 Family 56. DREPANIDÆ.
 DREPANE Cuvier and Valenciennes.
 333. *Drepane punctata* (Gmelin).
 Family 57. PLATACIDÆ.
 PLATAX Cuvier.
 334. *Platax orbicularis* (Forskål). *Pe'ape'a uli*.
 Family 58. CHÆTODONTIDÆ.
 FORCIPIGER Jordan and McGregor (R. C.)
 335. *Forcipiger longirostris* (Boussonet).
 MEGAPROTODON Guichenot.
 336. *Megaprotodon trifascialis* (Quoy and Gaimard). *Mutu uli*.
 CHÆTODON Linnæus.
 337. *Chætodon setifer* Forskål. *Si'u*; *Tiftifi sama*.
 338. *Chætodon vagabundus* Linnæus. *Tiftifi mata-ume*; *Samasama*.
 339. *Chætodon rafflesi* Bennett.
 CHÆTODONTOPS Bleeker.
 340. *Chætodontops peluwensis* (Kner). *Tiftifi Pu sama*. (Orange-tailed).
 341. *Chætodontops ulietensis* (Cuvier and Valenciennes).
 342. *Chætodontops lineolatus* (Cuvier and Valenciennes).
 343. *Chætodontops lunula* (Lacepède). *Tiftifi laumea*.
 344. *Chætodontops mertensi* Cuvier and Valenciennes. *Tiftifi pa'ipa'i*.
 345. *Chætodontops melanotus* Bloch and Schneider. *Tiftifi pulepule pa'ipa'i*.
 346. *Chætodontops reticulatus* Cuvier and Valenciennes. *Matagi pulepule*; *Tiftifi a'au*.
 343. *Chætodontops unimaculatus* Bloch. *Tiftifi pulepule*; *Tiftifi samasama*.
 RABDOPHORUS Kaup.
 348. *Rabdophorus ephippium* (Cuvier and Valenciennes). *Tiftifi tiaona*; *Tiftifi ila*; *tiftifi tusi*.
 349. *Rabdophorus semeion* (Bleeker).
 350. *Rabdophorus citrinellus* (Broussonet). *Tiftifi uli*; *Tiftifi lanifi*; *Manini*.
 351. *Rabdophorus trifasciatus* (Park). *Tiftifi tala*.
 352. *Rabdophorus ornatissimus* (Solander). *Tiftifi a'au*.
 HENIOCHUS Cuvier and Valenciennes.
 353. *Heniochus macrolepidotus* (Linnæus). *Laulaufau*.
 353. *Henichus permutatus* Bennett.
 355. *Henichus varius* (Cuvier and Valenciennes).
 356. *Heniochus monoceros* Cuvier and Valenciennes.
 ACANTHOCHÆTODON Bleeker.
 357. *Acanthochætodon diacanthus* (Boddaert). *Aimeo*; *Alamu*.
 358. *Acanthochætodon bicolor* (Bloch). *Ulapua*.
 CENTROPYGE Kaup.
 359. *Centropyge flavissima* Cuvier and Valenciennes. *Lega*; *Aimeo*.
 360. *Centropyge tutuilæ* Jordan and Jordan.

361. *Centropyge nicobariensis* (Bloch and Schneider).

FAMILY 59. ZANCLIDÆ.

ZANCLUS Lacepède.

362. *Zanclus cornutus* Linnæus. *Tiftifi; Galafa.*

Family 60. ACANTHURIDÆ.

ACANTHURUS Forskål.

363. *Acanthurus achilles* (Shaw). *Pone i'umumu.*
 364. *Acanthurus aliala* (Lesson). *Alamea samasama; Loata.*
 365. *Acanthurus olivaceus* (Bloch and Schneider).
 366. *Acanthurus nigricans* (Linnæus). *Uli-uli maia; Pu sina.*
 367. *Acanthurus lineatus* (Gmelin). *Alogo.*
 368. *Acanthurus atramentatus* Jordan and Evermann.
 369. *Acanthurus elongatus* Cuvier and Valenciennes. *Unavau.*
 370. *Acanthurus matoides* Cuvier and Valenciennes. *Umelei.*
 371. *Acanthurus aquilinus* Jordan and Seale. *Palagi samasama.*
 372. *Acanthurus triostegus* (Linnaeus). *Manifi.*
 373. *Acanthurus guttatus* (Forster). *Moana; Aau.*

CTENOCHÆTUS Gill.

374. *Ctenochætus striatus* (Quoy and Gaimard). *Palagi; Ponepone; Aau.*
 SCOPAS (Bonaparte) Jordan.
 375. *Scopas rhombeus* (Kittlitz). *Ilu; Ali palagi.*

376. *Scopas rostratus* (Günther). *Ali.*

ZEBRASOMA Swainson.

377. *Zebrosoma veliferum* (Bloch). *Lupo.*

NASO Lacepède.

378. *Naso unicornis* (Forskål). *Iw'ilia segi; Ume; Umelei.*

379. *Naso incipiens* Jenkins.

CALLICANTHUS Swainson.

380. *Callicanthus lituratus* (Forster). *Iw'ilia; Umelei; Ume.*
 381. *Callicanthus garretti* (Seale).

Family 61. TEUTHIDÆ.

382. *Teuthis marmoratus* (Quoy and Gaimard). *Lo pa'u'ulu.*
 383. *Teuthis striolatus* (Günther).
 384. *Teuthis punctatus* (Bloch and Schneider). *Lo 'ele'ele.*
 385. *Teuthis rostratus* (Cuvier and Valenciennes).

LO Seale.

386. *Lo vulpinus* (Schlegel and Müller). *Lo.*

Family 62. BALISTIDÆ.

CANTHIDERMIS Swainson.

- 386a. *Canthidermis senticosus* Richardson.

BALISTES Linnæus.

387. *Balistes vidua* Richardson. *Sumu pa'epa'e mumu; Sumu i'u mumu.*
 387a. *Balistes bursa* (Lacepède).
 388. *Balistes chrysopterus* Bloch and Schneider. *Sumu pa'epa'e.*
 389. *Balistes flavomarginatus* Rüppell. *Sumu Sumu laolao.*

BALISTAPUS Tilesius.

390. *Balistapus aculeatus* (Linnæus). *Sumu uliuli.*

391. *Balistapus rectangulus* (Bloch and Schneider). *Sumu pulepule.*

392. *Balistapus undulatus* (Bloch and Schneider). *Sumu uli.*

Family 63. MONACANTHIDÆ.

CANTHERINES Swainson.

393. *Cantherines sandwichensis* (Quoy and Gaimard). *Aimeo.*

AMANSES Gray.

394. *Amanses scopas* (Cuvier). *Sisitui.*

OXYMONACANTHUS Bleeker.

395. *Oxymonacanthus longirostris* (Bloch and Schneider). *Aleva.*

MONACANTHUS Cuvier.

396. *Monocanthus melanocephalus* Bleeker. *Pa'u-mea; Moloasi.*

Family 67. OSTRACIIDÆ.

OSTRACION Linnæus.

397. *Ostracion tuberculatum* Linnæus. *Moamo Uli.*

398. *Ostracion lentiginosum* Bloch and Schneider. *Moamo Uliuli.*

399. *Ostracion sebæ* Bleeker. *Moamo samasama.*

LACTORIA Jordan and Fowler.

400. *Sphærodes hypselogeneion* (Bleeker).

Family 65. TETRAODONTIDÆ.

SPHÆROIDES (Lacepède).

- 400a. *Sphæroides hypselogeneion* (Bleeker).
 OVOIDES Cuvier.

401. *Ovoides hispidus* (Linnæus). *Sue.*

402. *Ovoides nigropunctatus* (Bloch and Schneider). *Sue.*

403. *Ovoides immaculatus* (Bloch and Schneider).

CANTHIGASTERIDÆ.

CANTHIGASTER Swainson.

405. *Canthigaster solandri* (Richardson). *Sue mimi.*

406. *Canthigaster amboinensis* (Bleeker) = (psigma Jordan and Evermann).

407. *Canthigaster valentini* (Bleeker).

Family 67. DIODONTIDÆ.

DIODON Linnæus.

408. *Diodon hystrix* Linnæus. *Tauta.*

Family 68. SCORPÆNIDÆ.

409. *Scorpenodes guamensis* (Quoy and Gaimard). *La'otale.*

410. *Scorpenodes scabra* (Ramsay and Ogilby).

SEBASTAPISTES Gill.

411. *Sebastapistes laotale* Jordan and Seale. *La'otale.*

SCORPÆNOPSIS Bleeker.

412. *Brachirus sausaulele* (Jordan and Schneider). *Nofu.*

413. *Scorpenopsis novæ-guineæ* Cuvier and Valenciennes.

BRACHIRUS Swainson.

412. *Brachirus saucaulele* (Jordan and Seale). *Sausaulele.*

413. *Brachirus brachypterus* (Cuvier and Valenciennes).

PTEROIS Cuvier.

414. *Pterois volitans* (Linnæus). *Sausaulele.*

415. *Petrois radiata* Solander.
SYNANCEJICHTHYS Bleeker.
416. *Synancejichthys verrucosa* (Bloch and Schneider). *Nofu*.
Family 69. CARACANTHIDÆ.
CARACANTHUS Kroyer.
417. *Caracanthus maculatus* Gray. *Tu'u'u*.
Family 70. PLATYCEPHALIDÆ.
PLATYCEPHALUS Bloch.
418. *Platycephalus variolosus* Günther.
Family 71. ELEOTRIDÆ.
VALENCIENNEA Bleeker.
490. *Valenciennea longipinnis* Lay and Bennett.
491. *Valenciennea violifera* Jordan and Seale. *Ta'oto*.
ELEOTRIS Schneider.
492. *Eleotris fusca* (Bloch and Schneider). *Pa'ofu*.
QUISQUILIUS Jordan and Evermann.
493. *Quisquilius sclateri* (Steindachner)
ASTERROPTERIX Rüppell.
494. *Asterropteryx semipunctatus* Rüppell.
HYPSELEOTRIS Gill.
495. *Hypseleotris guntheri* (Bleeker). *Malu vai*.
EVIOTA Jenkins.
496. *Eviota zonura* Jordan and Seale. *Lili*.
497. *Eviota prasites* Jordan and Seale. *Lili*.
498. *Eviota afelei* Jordan and Seale.
499. *Eviota smaragdus* Jordan and Seale.
500. *Eviota distigma* Jordan and Seale.
501. *Eviota sebreei* Jordan and Seale.
502. *Eviota herrei* Jordan and Seale.
503. *Eviota pruinosa* Jordan and Seale.
TRIMMA Jordan and Seale.
504. *Trimma caesiura* Jordan and Seale.
HETERELEOTRIS Bleeker.
505. *Heteroleotris clara* Jordan and Seale.
506. *Heteroleotris phænna* Jordan and Seale.
VITREOLA Jordan and Seale.
501. *Vitreola sagitta* Jordan and Seale.
PERIOPHTHALMUS Bloch & Schneider.
- Family 72. PERIOPHTHALMIDÆ.
508. *Barbarus* Linnæus. *Mano'o; Talae*.
Family 73. GOBIIDÆ.
GNATHOLEPIS Bleeker.
509. *Gnatholepis deltoides* (Seale).
VAIMOSA Jordan and Seale.
510. *Vaimosa fontinalis* Jordan and Seale.
PARAGOBIODON Bleeker.
511. *Paragobiodon echinocephalus* (Rüppell.)
512. *Paragobiodon xanthosomus* Bleeker.
ZONOGOBIOUS Bleeker.
513. *Zonogobius semidoliatus* (Cuvier and Valenciennes). *Mano'o*.
VAILIMA Jordan and Seale.
514. *Vailima stevensoni* Jordan and Seale. *Pa'ofu*.
DROMBUS Jordan and Seale.
515. *Drombus tutuillæ* Jordan and Seale.
RHINOGOBIUS Gill.
516. *Rhinogobius corallinus* Jordan and Seale.
517. *Rhinogobius neophytus* (Günther).
518. *Rhinogobius muscarum* Jordan and Seale.
519. *Rhinogobius nebulosus* (Forskål).
GOBIUS Linnæus.
520. *Gobius ornatus* Rüppell.
BATHYGOBIUS Bleeker.
521. *Bathygobius fuscus* (Rüppell). *Pa'ofu*.
522. *Bathygobius crassiceps* Jordan and Seale.
GLOSSOGOBIOUS Gill. •
523. *Glossogobius vaisiganus* Jordan and Seale.
CHÆNOGOBIUS Gill.
524. *Chænogobius erythrops* Jordan and Seale.
CHONOPHORUS Poey.
525. *Chonophorus ocellaris* (Broussonet). *Mano'o; Pa'ala*.
526. *Chonophorus genivittatus* (Cuvier and Valenciennes). *Teli*.
AMBLYGOBIUS Bleeker.
527. *Amblygobius phalæna* (Cuvier and Valenciennes).
OXYURICHTHUS Bleeker.
528. *Oxyurichthys ophtthalmoneumus* (Bleeker).
WAITEA Jordan and Seale.
529. *Waitea mystacina* (Cuvier and Valenciennes).
MARS Jordan and Seale.
530. *Mars strigiliceps* Jordan and Seale.
KELLLOGGELLA Jordan and Seale.
531. *Kelloggella cardinalis* Jordan and Seale.
PSEUDOGOBIODON Bleeker.
532. *Pseudogobiodon citrinus* Rüppell. *Ulitui* (Big-head).
SICYOPTERUS Gill.
533. *Sicyopterus tæniurus* (Günther).
534. *Sicyopterus pugnans* (Ogilvie-Grant).
535. *Sicyopterus tauæ* Jordan and Seale.
Family 74. ECHENEIDÆ.
536. *Echeneis nacurates* (Linnæus). *Talita-tiuli*.
537. *Remora remora* Linnæus.
Family 75. PLEURONECTIDÆ.
PLATOPHRYS Swainson. *Ali*.
538. *Platophrys mancus* (Broussonet). *Ali*.
534. *Platophrys pantherinus* (Rüppell). *Ali*.
Family 76. SOLEIDÆ.
SOLEICHTHYS Bleeker.
540. *Soleichthys heterorhinos* (Bleeker).
Family 77. PTEROPSARIDÆ.
PARAPERISCIS Bleeker.
541. *Paraperiscis tetracanthus* (Lacepède). *Ta'oto*.
OSURUS Jordan and Evermann.
542. *Osurus schauinslandi* (Steindachner).
Family 78. CALLIONYMIIDÆ.
SYNCHIROPUS Gill.
543. *Synchiropus lili* Jordan and Seale. *Lili*.
Family 80. TRICHONOTIDÆ.
KRÆMERIA Steindachner.
- Kræmeria samoënsis Steindachner.
- Family 81. GOPOLESOCIDÆ.
ASPASMAGASTER Waite.
- Aspasmagaster oro (Steindachner).
Family 79. CLINIDÆ.
ENNEAPTERYGIUS Rüppell.
544. *Enneapterygius minutus* (Günther).

545. *Enneapterygius hemimelas* (Kner and Steindachner).
 546. *Enneapterygius tusalæ* Jordan and Seale.
 547. *Enneapterygius pardochir* Jordan and Seale.
 548. *Enneapterygius tutuilæ* Jordan and Seale.
 549. *Enneapterygius cerasinus* Jordan and Seale.
 550. *Enneapterygius hudsoni* Jordan and Seale.
 Family 82. **BLENNIIDÆ.**
HYPLEUROCHILUS Gill.
 551. *Hypleurochilus vaillanti* Jordan and Seale.
RUPISCARTES Swainson.
 552. *Rupiscartes periophthalmus* Cuvier and Valenciennes.
 553. *Rupiscartes caudolineatus* (Günther).
 554. *Rupiscartes striatus* (Quoy and Gaimard). *Mano'o a'au*.
 555. *Rupiscartes coronatus* (Günther).
 556. *Rupiscartes variolosus* (Cuvier and Valenciennes).
 557. *Rupiscartes alboguttatus* (Kner).
 558. *Rupiscartes guttatus* (Cuvier and Valenciennes).
 559. *Rupiscartes thalassinus* (Jordan and Seale).
 560. *Rupiscartes musilæ* (Jordan and Seale).
 561. *Rupiscartes sebæ* (Cuvier and Valenciennes).
SALARIAS Cuvier.
 562. *Salarias lineatus* Bleeker.
 563. *Salarias fasciatus* (Bloch).
 564. *Salarias biseriatus* (Cuvier and Valenciennes). *Mano'o a'au*.
 565. *Salarias sindonis* Jordan and Seale.
 566. *Salarias atkinsoni* Jordan and Seale.
 567. *Salarias quadricornis* (*S. garmani* J. and B.).
 568. *Salarias edentulus* (Bloch and Schneider).
 569. *Salarias rechingeri* Steindachner (*S. garmani* J. and S.).
 570. *Salarias bryani* Jordan and Seale.
 571. *Salarias striatamaculatus* Kner and Steindachner.
EXALLIAS Jordan and Evermann.
 572. *Exallias brevis* (Kner). *Mano'o gatala*.
PETROSCIRTES Rüppell.
 573. *Petroscirtes longifilis* Kner.
 574. *Petroscirtes filamentosus* (Cuvier and Valenciennes).
 575. *Petroscirtes azureus* Jordan and Seale.
 576. *Petroscirtes tapeinosoma* Bleeker.
 577. *Petroscirtes atrodorsalis* Günther.
 578. *Petroscirtes xestus* Jordan and Seale.
 579. *Petroscirtes obliquus* Garman.
ENCHELYURUS Peters.
 580. *Enchelyurus ater* (Günther).
 Family 83. **CARAPIDÆ.**
JORDANICUS Gilbert.
 580a. *Jordanicus gracilis* (Bleeker).
CARAPUS Rafinesque.
 581. *Carapus homei* (Richardson).
 Family 84. **BROTULIDÆ.**
DINEMATICHTHYS Bleeker.
 582. *Dinematichthys iluocæteoides* Bleeker. *Tapotopoto*.
 Family 85. **ANTENNARIIDÆ.**
ANTENNARIUS Lacepède.
 583. *Antennarius nummifer* (Cuvier).
 585. *Antennarius nigramaculatus* Steindachner.

A List of the Fishes of Tasmania

By CLIVE LORD, F. L. S.

Director of the Tasmanian Museum, Hobart, Tasmania

This paper, the sixth of its series, is a catalogue of the fishes of Tasmania, mostly as recorded by Messrs. Clive Lord and H. H. Scott in their "Synopsis of the Vertebrate Animals of Tasmania," Hobart, 1924. These fishes naturally represent the southern inhabitants of the Australian zone, the southernmost of forms found in the Pacific.

DAVID STARR JORDAN.

Subphylum **CEPHALOCHORDATA** (Acrania)—Lancelets.

Family 1. **BRANCHIOSTOMIDÆ.**

1. *Epigonichthys bassanus* Günther.—*Lancelet*.

Subphylum **CRANIATA** (Lampreys, Fishes).
 Class **CYCLOSTOMATA.**

Family 2. **MORDACIIDÆ.**

2. *Mordacia mordax* Rich.—*Short-headed Lamprey*.

3. *Geotria australis* Gray.—*Pouched Lamprey*.

Class **ELASMOBRANCHI.**

Order **SELACHII.**—Sharks.

Family 3. **HEXANCHIDÆ.**

4. *Notorhynchus pectorosus* Garman.—*Seven gilled Shark*.

5. *Heptarhynchus perlo* Bonn.—*One-finned Shark*.

Family 4. **HETERODONTIDÆ.**

6. *Heterodontus philippi* B. & S.—*Bull-headed Shark* (*Port Jackson Shark*).

7. *Gyroplendrodus galeatus* Günther.—*Crested-headed Shark* (*Crested Port Jackson Shark*).

Family 5. **CARCHARHINIDÆ.**

8. *Prionace glauca* Linn.—*Blue Shark*.

9. *Galeorhinus australis* Macleay.—*School Shark*.

20. *Squalus megalops* Macleay.—*Piked Dog Shark*.

Family 6. SPHYRNIDÆ.

11. *Sphyrna zygaena* Linn.—*Hammer-headed Shark*.

Family 7. ORECTOLOBIDÆ.

12. *Orectolobus maculatus* Bonn.—*Wobbegong*.

13. *Parascyllium collare* Ramsay and Ogilby.—*Collared Cat Shark*.

14. *Parascyllium variolatum* Dum.—*Varied Cat Shark*.

Family 8. SCYLLIORHINIDÆ.

15. *Halaelurus analis* Ogilby.—*Spotted Cat Shark*.

16. *Cephaloscyllium isabella* Duméril.—*Swell Shark*.

Family 9. ALOPIIDÆ.

17. *Alopias vulpinus* Bonn.—*Thresher Shark*.

Family 10. CARCHARHINIDÆ.

18. *Carcharhinias arenarius* Ogilby.—*Long-toothed Shark*.

Family 11. ISURIDÆ.

19. *Isurus glaucus* M. & H.—*Blue Pointer*.

Family 12. CETORHINIDÆ.

- Cetorhinus maximus.—*Basking Shark*.
One record, Banis Bay, 1926.

Family 13. SQUALIDÆ.

20. *Squalus megalops* Macleay.—*Piked Dog Fish*.

21. *Squalus fernandinus* Molina.—*Spotted Dog Fish*.

22. *Oxynotus brianiensis* Ogilby.—*Prickly Dog Fish*.

Family 14. PRISTIOPHORIDÆ.

23. *Pristiophorus cirratus* Latham.—*Saw Shark*.

24. *Pristiophorus nudipinnis* Günther.—*Saw Shark*.

Family 15. SQUATINIDÆ.

25. *Squatina australis* Regan.—*Angel Shark*.

Order BATOIDEI.—Rays.

Family 16. RHINOBATIDÆ.

26. *Trygonorrhina fasciata* M. & H.—*Fiddler*.

Family 17. TORPEDINIDÆ.

27. *Narcine tasmaniensis* Rich.—*Tasmanian Numbfish*.

Family 18. RAJIDÆ.

28. *Raja nitida* Günther.—*Rough-backed Skate*.

29. *Raja lemprieri* Rich.—*Thorn-back Skate*.

Family 19. DASYATIDÆ.

30. *Dasyatis brevicaudatus* Hutton.—*Short-tailed Stingaree*.

31. *Urolophus cruciatus* Lacep.—*Banded Stingaree*.

32. *Urolophus viridis* McCulloch.—*Green-backed Stingaree*.

33. *Urolophus bucculentus* Macleay.—*Sandy-backed Stingaree*.

Family 20. AETOBATIDÆ.

34. *Aetobatus australis* Macleay.—*Eagle or Whiptail Ray*.

Order HOLOCEPHALI.—Ghost Sharks, Etc.

Family 20. CHIMÆRIDÆ.

35. *Chimæra ogilbyi* Waite.—*Ghost Shark*.

Family 21. CALLORHYNCHIDÆ.

36. *Callorhynchus millii* Bory.—*The Elephant Fish*.

Class PISCES.

Sub-Class Teleostei.—Bony Fishes.

Order ISOSPONDYLI.—Herrings and Trout-like Fish.

Family 22. ENGRAULIDÆ.

37. *Engraulis australis* Shaw.—*Australian Anchovy*.

Family 23. CLUPEIDÆ.

38. *Clupea bassensis* McCull.—*Australian Spratt*.

39. *Spratelloides robustus* Ogilby.—*Blue Sprat*.

40. *Sardinia neopilchardus* Steindachner.—*Australian Pilchard*.

Family 24. GONORHYNCHIDÆ.

41. *Gonorhynchus greyi* Rich.—*Beaked Salmon*.

Family 25. GALAXIIDÆ.

42. *Galaxias attenuatus* Jenys.—*Jollytail*.

43. *Galaxias weddoni* Johnston.—*The Mersey Jollytail*.

44. *Galaxias truttaceus* Cuv. and Val.—*Spotted Mountain Trout*.

45. *Galaxias auratus* Johnston.—*Lake Trout*.

46. *Galaxias affinis*.

Family 26. SALMONIDÆ.

- (25a) *Introduced species of Salmonidae*.

- 46a. *Salmo salar* Linn.—*Salmon*.

- 46b. *Salmo salar sebago*.—*Sebago Salmon*.

- 46c. *Salmo trutta* Linn.—*Brown Trout*.

- 46d. *Salmo irideus* Gibbons.—*Rainbow Trout*.

- 46e. *Salvelinus fontinalis*.—*American Brook Trout*.

- 46f. *Oncorhynchus nerka*.—*Red Salmon, Sockeye Salmon (Sukkeh)*.

- 46g. *Oncorhynchus tshawytscha*.—*Quinnat Salmon*.

Family 26. ARGENTINIDÆ.

47. *Argentina elongata* Hutton.—*Siel Smelt*.

Family 27. APLOCHITONIDÆ.

48. *Prototroctes maræna* Günther.—*Australian Grayling ("Cucumber Herring")*.

49. *Lovettia sealii* Johnston. — *Derwent Smelt*.

Family 28. RETROPINNIDÆ.

50. *Retropinna tasmania* McCulloch.—*Tasmanian Smelt ("Whitebait")*.

Order INIOMI.—Cucumber Fish, Etc.

Family 29. SUDIDÆ.

51. *Chlorophthalmus nigripinnis* Günther.—*Cucumber Fish*.

Family 30. ALEPISAUROIDÆ.

52. *Alepisaurus ferox* Lowe (*Plagyodus*).—*Lancet Fish*.

Order OSTARIOPHYSI (Introduced).

Family 30a. CYPRINIDÆ.

- 52a. *Carassius carassius* Linn.—*European Carp (Intro.)*.

- 52b. *Carassius auratus* Linn.—*Gold Fish (Intro.)*.

- 52c. *Tinca tinca* Linn.—*English Tench (Intro.)*.

Order SYMBRANCHII.—Pigmy Eels.

Family 31. CHEILOBRANCHIDÆ.

53. *Alabes rufus* Macleay.—*Red-banded Shore Eel*.
 54. *Alabes dorsalis* Rich.—*Striped Brown Eel*.

Order APODES.Eels.

Family 32. ANGUILLIDÆ.

55. *Anguilla australis* Rich.—*Short-finned Eel*.
 56. *Anguilla reinhardti* Sldr.—*Long-finned Eel*.

Family 33. CONGRIDÆ.

57. *Conger conger* Linn.—*Common Conger Eel*.

58. *Conger wilsoni* Castel.—*Conger Eel*.

59. *Congermuræna habenata* Rich.—*Little Conger Eel (Silver Eel of Tasmania)*.

Family 34. ECHELIDÆ.

60. *Muraenichthys tasmaniensis* McCull.—*Tasmanian Worm Eel*.

61. *Muraenichthys breviceps* Günther.—*Short-headed Eel*.

Family 35. OPHICHTHYIDÆ.

62. *Ophisurus serpens* Linn.—*Snake Eel*.

Order SELENICHTHYES.

Order LUPHORBRANCHII. Pipe-fish, Etc.

Family 37. LAMPRIDIDÆ.

66. *Lampris regius* Bonn. *Opah*.

Family 36. MACRORHAMPHOSIDÆ.

63. *Macrorhamphosus elevatus* Waite.—*Bel-lows Fish*.

64. *Centriscoops humerosus* Rich.—*Bellows Fish*.

65. *Notopogon hilliei* Regan.—*Bellows Fish*.

Family 38. SYNGNATHIDÆ.

67. *Corythoichthys phillipi* Lucas.—*Pipe Fish*.

68. *Urocampus carinirostris* Castelnau.—*Pipe Fish*.

69. *Stigmatopora argus* Rich.—*Pipe Fish*.

70. *Stigmatopora nigra* Kaup.—*Pipe Fish*.

71. *Leptonotus semistriatus* Kaup.—*Pipe Fish*.

72. *Solegnathus spinosissimus* Günther.—*Pipe Fish*.

73. *Solegnathus fasciatus* Günther.—*Sea Horse*.

74. *Histiogamphelus briggsi* McCulloch.

75. *Phyllopteryx foliatus* Shaw.—*Leafy Sea Horse*.

76. *Hippocampus abdominalis* Lesson.—*Sea Horse*.

77. *Hippocampus breviceps* Peters.—*Sea Horse*.

Order HYPOSTOMIDES.—Dragon Fish.

Family 39. PEGASIDÆ.

- Acanthopegasus lancifer* Kaup.—*Dragon Fish*.

Order SYNGNATHI.—Garfish, Etc.

Family 40. SCOMBRESOCIDÆ.

- Scombresox fosters* Cuv. & Val.—*Billfish*.

Family 41. HEMIRHAMPHIDÆ.

- Hemiramphus intermedius* Cantor.—*Sea Garfish*.

Order ANACANTHINI.—Cods and Whiptails.

Family 42. GADIDÆ.

- Lotella callarias* Günther.—*Kelp Rock Cod*.

- Physiculus bachus* Forster.—*Red Rock Cod*.

Family 43. CORYPHÆNOIDIDÆ.

Family 43. MACROURIDÆ.

- Ceiorhynchus australis* Rich.—*Grenadier or Whiptail*.

- Macruronus novæ-zelandiæ* Hector.—*Whip-tail*.

- Optonurus denticulatus* Rich.—*Deep Sea Whiptail*.

Order BERYCOMPORPHI.—Nannygai, Etc.

Family 44. TRACHICHTHYIDÆ.

- Trachichthodes affinis* Günther.—*Nannygai*.

- Trachichthys australis* Shaw.

- Paratrachichthys trailli* Hutton.—*Sandpaper Fish*.

Family 45. ZEIDÆ.

- Zeus faber* Linn.—*John Dory*.

- Zenopsis nebulosa* Schleg.—*Mirror Dory*.

- Cyttus novæ-zealandiæ* Arthur.—*Silver Dory*.

- Cyttus australis* Rich.—*Silver Dory*.

Order ALLOTRIIONGATHI.—Ribbon Fish.

Family 46. REGALECIDÆ.

- Regalecus glesne* Ascanius.—*The Oar Fish*.

Family 47. TRACHYPTERIDÆ.

- Trachyperus altivelis* Kner.—*Ribbon Fish*.

Family 48. LOPHOTIDÆ.

- Lophotes guntheri* Johnston.

Order HETEROSOMATA.—Flounders, Etc.

Family 49. BOTHIDÆ.

- Pseudorhombus multimaculatus* Günther.—*Small-toothed Flounder*.

- Pseudorhombus tenuirostrum* Waite.—*Deep-water Flounder*.

- Lophonectes gallus* Günther.—*Crested Floun-der*.

Family 50. PLEURONECTIDÆ.

78. *Ammotretis rostratus* Günther.—*Long-Snouted Flounder ("Sole" of Tas-mania)*.

79. *Ammotretis tudori* McCulloch.—*Flounder*.

80. *Ammotretis macrolepis* McCulloch.—*Flounder*.

81. *Rhombosolea flesoides* Günther.—*South-ern Flounder*.

82. *Rhombosolea tapirina* Günther.—*Floun-der*.

Family 51. CYNOGLOSSIDÆ.

83. *Symphurus unicolor* Günther.—*Tongue or Lemon Sole*.

Order PERCOMORPHI.

Sud-Order PERCESOCES.

Family 52. MUGILIDÆ.

84. *Mugil cephalus* Linn.—*Sea Mullet*.

85. *Myxus elongatus* Günther.—*Sand Mullet (Tallegallane of New South Wales)*.

86. *Agonostomus forsteri* Cuv. & Val.—*Yel-low-eyed Mullet*.

Family 53. ATHERINIDÆ.

87. *Atherina microstoma* Günther.—*Silver Fish*.

88. *Atherina dannevigii* McCulloch.—*Silver Fish*.

89. *Atherina presbyteroides* Rich.—*Silver Fish*.

90. *Atherina hepsetoides* Rich.—*Silver Fish*.

91. *Atherina tamarensis* Johnston.—*Silver Fish*.
92. *Atherina jacksoniana* Quoy & Gaim.—*Silver Fish*.
- Family 54. SPHYRÆNIDÆ.
93. *Sphyræna novæ-hollandiæ* Günther.—*Short-finned Sea Pike*.
- Sub-Order STROMATEOIDEA.
- Family 55. STROMATEIDÆ.
95. *Seriola brama* Günther.—*Snotgall Trevally*.
95. *Seriola punctata* Forster.—*Spotted Trevally*.
96. *Seriola lalandi* Günther.—*Mackerel Trevally*.
97. *Hyperoglyphe johnstoni* Morton.
- Sub-Order PERCOIDEA.
- Family 56. PERCIDÆ.
- 97a. *Perca fluviatilis* Rondel.—*English River Perch* (Intro.).
- Family 57. SERRANIDÆ.
98. *Polyprion oxygeneios* Bloch and Schneider.—*Hapuku* (of New Zealand).
99. *Callanthis allporti* Günther.—*Allport's Perch*.
100. *Casioperca lepidotera* Forster.—*Red Perch*.
101. *Casioperca rasor* Rich.—*Red Perch or Tasmanian Barber*.
102. *Percalates colonorum* Günther.—*Brackish-water Perch*.
103. *Nannopercia tasmanica* Johnston.—*Fresh-water Perch*.
- Family 58. PLESIOPIDÆ.
104. *Trachinops caudomaculatus* McCoy.—*Blotched-tailed Trachinops*.
- Family 59. APOGONIDÆ.
105. *Apogon fasciatus* Shaw.—*Soldier Fish* (of New South Wales).
106. *Apogon novæ-hollandiæ* Val.
107. *Apogon lempieri* Johnston.
107. *Dinolestes lewini* Giff.—*Long-finned Sea Pike*.
- Family 60. OPLEGNATHIDÆ.
109. *Oplegnathus conwayi* Rich.—*Knife-jaw or Pigfish*.
- Family 61. SILLAGINIDÆ.
110. *Sillago punctatus* Cuv. and Val.—*Spotted Whiting*.
111. *Sillago maculata* Quoy and Gaim.—*Trumpeter Whiting*.
112. *Sillago bassensis* Cuv. and Val.—*School Whiting*.
- Family 62. POMATOMIDÆ.
113. *Pomatomus saltatrix* Linn.—*Tailor or Skipjack*.
- Family 63. CARANGIDÆ.
114. *Trachurus declivis* Jenyns.—*Yellow Tail*.
115. *Trachurus novæ-zelandiæ* Rich.—*Horse Mackerel of Tasmania and New Zealand* (Cowanyoung of New South Wales).
116. *Longirostrum georgianum* Cuv. and Val.—*Silver Trevally*.
117. *Naucrates ductor* Linn.—*Pilot Fish*.
118. *Seriola grandis* Castel.—*Tasmanian Yellow Tail* (Kingfish of New South Wales).
- Family 64. ARRIPIDIDÆ.
119. *Arripis trutta* B. and S.—*Australian Salmon* ("Native Salmon").
- Family 65. EMMELICHTHYIDÆ.
120. *Emmelichthys nitidus* Rich.—*Pearl Fish*.
- Family 66. SCLÆNIDÆ.
121. *Sciaena antarctica* Castelnau.—*Jew Fish* (of New South Wales), *Dew Fish* (of Queensland), *King Fish* (of Victoria and West Australia), *Butter Fish* (of South Australia).
- Family 67. MULLIDÆ.
122. *Upeneichthys porosus* Cuv. and Val.—*Blue-striped Red Mullet*.
- Family 68. SPARIDÆ.
123. *Pagrosomus auratus* B. and S.—*Snapper*.
124. *Sparus australis* Günther.—*Silver Bream of Tasmania* (Black Bream of New South Wales).
- Family 69. GIRELLIDÆ.
125. *Girella tricuspidata* Q. and G.—*Black Bream, Tasmania*.
- Family 70. PEMPHERIDÆ.
126. *Liopempheris multiradiata* Klun.—*Big-scaled Bull Eye*.
- Family 71. PRIACANTHIDÆ.
127. *Parapriacanthus elongatus* McCulloch.—*Elongated Bull Eye*.
- Family SCORPIDIDÆ.
128. *Scorpius georgianus* Cuv. and Val.—*Sweep*.
- Family 72. CHÆTODONTIDÆ.
129. *Vinculum sexfasciatum* Rich.—*Six-banded Coral Fish*.
- Family 73. ENOPLIDÆ.
130. *Enoplosus armatus* Shaw.—*Old Wife or Zebra Fish*.
- Family 74. HISTIOPTERIDÆ.
131. *Paristiopterus labiosus* Günther.—*Giant Boar Fish*.
132. *Zanclus leucostictus* Ramsay and Ogilby.—*Short Boar Fish*.
133. *Pentaceropsis recurvirostris* Rich.—*Long-snouted Boar Fish*.
- Family 75. APLODACTYLIDÆ.
134. *Dactylosargus arcuatus* Rich.—*Marbled Kelp Fish*.
- Family 76. CHIRONEMIDÆ.
135. *Chironemus marmoratus* Günther.—*Large Kelp Fish*.
- Family 77. CHEILODACTYLIDÆ.
136. *Dactylopagrus macropterus* B. and S.—*Black and Silver Perch* (Jackass Fish of New South Wales and South Australia).

137. *Dactylopagrus morwong* R. and O.—*Dusky Morwong (Butter Perch)*.
 139. *Goniistius vizonarius* Kent.—*Magpie Perch*.
 140. *Cheilodactylus spectabilis* Hutton.—*Carp of Tasmania*.

Family 78. LATRIDÆ.

141. *Latris lineatus* B. and S.—*Real Trumpeter ("Stripey")*.
 142. *Latridopsis foseteri* Castelnau.—*Bastard Trumpeter*.
 143. *Latridopsis ciliaris* Forster.—*Bastard Trumpeter*.

Family 79. POMACENTRIDÆ.

145. *Abudefduf victoria* Günther.—*Rock Perch, "Scaly Fin."*

Family 80. LABRIDÆ.

146. *Pseudolabrus tetricus* Rich.—*Lila c-banded Parrot Fish*.
 147. *Pseudolabrus psittaculus* Rich.—*Parrot Fish*.
 148. *Pseudolabrus celidotus* Richardson.—*Parrot Fish*.
 149. *Pseudolabrus fucicola* Rich.—*Purple Parrot Fish*.
 150. *Pictilabrus laticlavus* Rich.—*Green-banded Parrot Fish*.
 151. *Achoerodus gouldii* Rich.—*Blue Groper*.
 152. *Verreo oxycephalus* Bleeker.—*Pig Fish*.

Family 81. NEOODACIDÆ.

153. *Neodax semifasciatus* Cuv. and Val.—*Rock Whiting (Stranger)*.
 154. *Neodox balteatus* Cuv. and Val.—*"Ground Mullet" Little Rock Whiting*.
 155. *Neodax beddomei* Johnston.—*Pigmy Rock Whiting*.
 156. *Olisthops cyanomelas* Rich.—*Herring Cale*.

Family 82. GADOPSIDÆ.

157. *Gadopsis marmorata* Rich.—*River Blackfish*.

Family 83. PTEROPEAKIPA.

158. *Parapercis allporti* Günther.—*Barred Grub Fish*.

Family 84. URANOSCOPIDÆ.

159. *Kathetostoma læve* Bl.—*Catfish (Stone-lifter)*.

Family 85. BOVICHTIDÆ.

160. *Pseudaphritis urvillii* Castel.—*Fresh-water Flathead or Sandy*.
 161. *Bovichtus variegatus* Cuv. and Val.—*Dragonet*.

Family 86. CALLIONYMIDÆ.

162. *Callionymus papilio* Günther.—*Painted Dragonet*.

Family 87. SCOMBRIDÆ.

163. *Scomber australasicus* Cuv. and Val.—*Mackerel*.
 164. *Gasterochisma melampus* Rich.—*Butter-fly Fish*.

Family 88. KATSUWONIDÆ.

165. *Auxis thazard* Lacep.—*Frigate Mackerel*.

Family 89. THUNNIDÆ.

166. *Thunnus maccoyi* Castel.—*Southern Tunny*.
 167. *Sarda orientalis* Schlegel.—*Horse Mackerel (of New South Wales)*.

Family 90. ISTIOPHORIDÆ.

168. *Makaira indica* Cuv. and Val.—*Sword Fish*.

Family 91. TRICHIURIDÆ.

169. *Lepidopus caudatus* Euph.—*Frost Fish*.

Family 92. GEMPLYIDÆ.

170. *Jordanidia solandri* Snyder.—*King Barracouta ("Kingfish" of Tasmania)*.
 171. *Thyrsites atun* Euph.—*Barracouta*.

Family 93. GOBIIDÆ.

172. *Gobius tamarensis* Johnston.—*Tamar Goby*.
 173. *Gobius lateralis* Macleay.—*Spotted Goby*.
 174. *Gobius hinsbyi* McCulloch & Ogilby.—*Girdled Goby*.

Family 94. BLENNIIDÆ.

175. *Blennius tasmanianus* Rich.—*Blenny (or "Bully")*.

Family 95. CLINIDÆ.

176. *Clinus perspicillatus* Cuv. and Val.—*Eel Blenny*.
 177. *Clinus johnstoni* Saville Kent.—*Johnston's Blenny*.
 178. *Cristiceps australis* Cuv. and Val.—*Weed Fish*.
 179. *Cristiceps forsteri* Castel.—*Forster's Blenny*.
 180. *Gillias clarkei* Morton.—*Clarke's Blenny*.

Sub-Order OPHIDIIDÆ.

Family 96. OPHIDIIDÆ.

181. *Genypterus blacodes* B. and S.—*Ling*.

Order DISCOCEPHALLI.—Sucker Fish.

Family 97. ECHENEIDIDÆ.

182. *Echeneis naucrates* Linn.—*Slender Sucker Fish*.
 183. *Remora remora* Linn.—*Short Sucker Fish*.

Order SCLEROPAREI.

Family 98. SCORPÆNIDÆ.

184. *Scorpæna cruenta* Rich.—*Gurnet (Red Rock Cod of New South Wales and South Australia)*.
 185. *Scorpæna cardinalis* Rich.—*Gurnet*.
 186. *Helicolenus percoides* Rich.—*Rock Gurnet*.
 187. *Neobastes thetidis* Waite.—*Rough Gurnet Perch*.
 188. *Neosebastes panda* Rich.—*Gurnet*.
 189. *Glyptauchen panduratus* Rich.—*Goblin Fish*.
 190. *Centropogon australis* Günther.—*"Fortesque" (of New South Wales)*.
 191. *Pentarogeton marmorata* Cuv. and Val.—*"Soldier" (of Tasmania)*.

Family 99. PATÆCIDÆ.

192. *Gnathanacanthus goetzei* Bleeker.—*Velvet Fish*.
 193. *Patæcus maculatus* Günther.—*Warty Prow Fish*.

Family 100. TRIGLIDÆ.

194. *Lepidotrigla vanessa* Rich.—*Butterfly Gournard*.195. *Chelidonichthys kumu* Lesson and Gurnard.—*Kumu Gurnard*.196. *Pterygotrigla polyommata* Rich.—*Sharp-beaked Gurnard*.

Family 101. HOPLICHTHYIDÆ.

197. *Hoplichthys haswelli* McCulloch.—*Spiny Flathead*.

Family 102. PLATYCEPHALIDÆ.

198. *Platycephalus fuscus* Cuv. and Val.—*Dusky Flathead*.199. *Platycephalus bassensis* Cuv. and Val.—*Common Tasmanian Flathead*.200. *Platycephalus lævigatus* C. and V.—*Smooth Flathead*.

Order XENOPTERI.

Family 103. GOBIESOCIDÆ.

202. *Diplocrepis cardinalis* Ramsay.—*Cling Fish*.202. *Aspasmogaster tasmaniensis* Günther.—*Tas. Cling Fish*.

Order HAPLAODOCI.

Family 104. BATRACHOIDIDÆ.

203. *Pseudobatrachus dubius* Shaw.—*Frog Fish*.

Order PEDICULATI.

Family 105. ANTENNARIIDÆ.

204. *Histrio histrio* Linn.—*Marbled Angler*.205. *Trichophryne mitchelli* Morton.—*Prickly Angler*.

Family 106. BRACHIONICHTHYIDÆ.

206. *Brachionichthys hirsutus* Lacep.—*Hand Fish*.207. *Brachionichthys politus* Rich.—*Red Hand Fish*.

Family 107. OGCOCEPHALIDÆ.

208. *Haliutæa breviceauda* Ogilby.—*Spinæ Frog Fish*.

Order PLECTOGNATHI.

Family 108. MONACANTHIDÆ.

209. *Cantherines hippocrepis* Q. and Gaim.—*Variable Leather Jacket*.210. *Cantherines guntheri* Macleay.—*Tooth-brush Leather Jacket*.211. *Cantherines spilomelanurus* Q. and G.—*Golden-eyed Leather Jacket*.212. *Cantherines maculosus* Rich.—*Small Brown Leather Jacket*.214. *Cantherines melas* Günther.—*Black Leather Jacket*.215. *Cantherines gunni* Günther.—*Dark Brown Leather Jacket*.216. *Cantherines convexirostris* Günther.—*Grey Leather Jacket*.217. *Cantherines rudis* Rich.—*White-banded Leather Jacket*.218. *Cantherines peronii* Hollard.—*Pale Brown Leather Jacket*.219. *Brachaluteres trossulus* Richardson.—*Pigmy Leather Jacket*.

Family 109. OSTRACIIDÆ.

220. *Aracana aurita* Shaw.—*Trunk Fish*.221. *Aracana ornata* Gray.—*Yellow-striped Trunk Fish*.

Family 110. TETRAODONTIDÆ.

222. *Spheroides hamiltoni* Rich.—*Toad Fish*.223. *Spheroides richei* Frem.—*Globe Fish*.

Family 111. DIODONTIDÆ.

224. *Allomycterus jaculiferus* Cuvier.—*Porcupine Fish*.225. *Atopomycterus nychthemerus* Cuvier.—*Slender-spined Porcupine Fish*.

Family 112. MOLIDÆ.

226. *Mola mola* Linn.—*Sun Fish*.

EDITORIAL NOTE

In this, the second of the new quarterly series of Scientific number of the Mid-Pacific Magazine, appears the usual assortment of miscellaneous articles popularizing the developments in science.

The Journal of the Pan-Pacific Research Institution, which appears regularly with the scientific number, contains two more of the series of papers on the fishes of the Pacific. This series is prepared by or under the editorial supervision of Dr. David Starr Jordan.

These, it will be recognized, are in no wise popular papers; they will attract only a limited group of students of that particular subject. Yet the same can be said of papers on any other line of science. We feel that the Journal is designed to fill just that real need—that of a medium for the publication of the achievements of scientific research work-

ers of the Pacific Coast countries along any line of scientific endeavor.

Contributions solicited. We invite scientists to contribute papers to the Journal. Fifty reprints will be supplied free of charge to contributors. Additional reprints will be supplied at cost if the request is filed with the manuscript.

THE EDITORIAL COMMITTEE.

G. H. GODFREY, Nematologist,
Association of Hawaiian Pineapple
Canners.

H. ATHERTON LEE, Plant Pathologist,
Hawaiian Sugar Planters'
Association.

A. J. MANGLES DORF, Geneticist,
Hawaiian Sugar Planters' Association.

Address any of the above at Honolulu.